

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in this application:

LISTING OF CLAIMS:

Claims 1 to 43. (Canceled).

44. (Previously Presented) A compact drive, comprising:
at least three drive components;
a central housing part, each drive component surrounded by the central housing part; and
at least one housing cover of the respective drive component to form a specific housing;
wherein the drive components include an electric motor, a gear unit and an electronic circuit;
wherein the electronic circuit includes a frequency converter;
wherein the frequency converter is positioned laterally with respect to a rotor shaft of the electric motor;
wherein the central housing part includes dividing walls that form individual compartments for the drive components inside the housing;
wherein the compartment for the gear unit is sealed off from the compartment for the electric motor, the compartment for the electronic circuit and an outer environment of the compact drive by a shaft sealing ring situated on the rotor shaft of the electric motor and by shaft sealing rings situated on an output shaft of the gear unit.

Claims 45 and 46. (Canceled).

47. (Previously Presented) A compact drive, comprising:
at least three drive components including an electric motor, a gear unit and an electronic circuit; and
a central housing part, a stator of the electric motor detachably connected to the central housing part;
wherein the electronic circuit includes a frequency converter;

wherein the frequency converter is positioned laterally with respect to a rotor shaft of the electric motor;

wherein the central housing part includes dividing walls that form individual compartments for the drive components inside a housing;

wherein the compartment for the gear unit is sealed off from the compartment for the electric motor, the compartment for the electronic circuit and an outer environment of the compact drive by a shaft sealing ring situated on the rotor shaft of the electric motor and by shaft sealing rings situated on an output shaft of the gear unit.

Claims 48 and 49. (Canceled).

50. (Previously Presented) The compact drive according to claim 47, wherein the stator is detachably connected to the central housing part by a clamping joint.

51. (Previously Presented) A compact drive, comprising:

an electric motor;

a brake;

a gear unit; and

a frequency converter, an output shaft of the gear unit and a rotor shaft positioned in parallel to each other, and a shaft-center distance determined by at least one gear stage; a first gear stage including a first toothed member connected to the rotor shaft and a second toothed member, which engages with the first toothed member and is connected to an intermediate shaft; the brake, including at least one brake-rotor shaft, integrated in a housing of the compact drive, the brake-rotor shaft parallel to the rotor shaft, the brake-rotor shaft connected to a toothed member, which engages with the second toothed member, and an electronics compartment for the frequency converter not being sealed with respect to a compartment of the electric motor.

52. (Previously Presented) A compact drive, comprising:

an electric motor;

a brake;

a gear unit; and

a frequency converter, an output shaft of the gear unit and a rotor shaft positioned in parallel to each other, and a shaft-center distance determined by at least one gear stage, a first gear stage including a first toothed member connected to the rotor shaft, and a second toothed member, which engages with the first toothed member and is connected to an intermediate shaft, the brake, including at least one brake-rotor shaft, integrated in a housing of the compact drive, the brake-rotor shaft parallel to the rotor shaft, the brake-rotor shaft connected to a toothed member, which engages with the second toothed member, and the rotor shaft and at least one shaft of the gear unit supported in a same housing part.

53. (Previously Presented) The compact drive according to claim 52, wherein the rotor shaft and the at least one shaft of the gear unit are supported in a central housing part.

54. (Previously Presented) The compact drive according to claim 51, wherein the brake is arranged as an electromagnetically operable brake.

55. (Previously Presented) The compact drive according to claim 51, wherein the brake is arranged as a piezoelectrically operating brake.

56. (Previously Presented) The compact drive according to claim 51, wherein at least one gear stage is arranged as a spur-gear stage.

57. (Previously Presented) The compact drive according to claim 51, wherein the gear stage is arranged a variable transmission

58. (Previously Presented) The compact drive according to claim 57, wherein the variable transmission includes one of (a) continuously variable, wide-belt transmission and (b) a chain drive.

59. (Previously Presented) The compact drive according to claim 51, wherein the electric motor is arranged as at least one of (a) a synchronous motor and (b) a permanent-magnet motor.

60. (Previously Presented) The compact drive according to claim 51, wherein the frequency converter is positioned laterally with respect to the rotor shaft.

61. (Previously Presented) The compact drive according to claim 51, wherein a gear region is sealed with respect to the environment and a region of the motor, as well as with respect to the electronics compartment.

62. (Previously Presented) The compact drive according to claim 51, wherein a gear region, a region of the motor, and the electronics compartment are at approximately the same temperature.

63. (Previously Presented) The compact drive according to claim 51, wherein the motor includes a sensor.

64. (Previously Presented) The compact drive according to claim 63, wherein the sensor includes a resolver stator and a resolver rotor.

65. (Previously Presented) The compact drive according to claim 51, wherein the rotor shaft and at least one shaft of the gear unit are supported in a same housing part.

66. (Previously Presented) The compact drive according to claim 61, wherein a single shaft-sealing ring is arranged on the rotor shaft.

67. (Previously Presented) The compact drive according to claim 51, wherein three shaft-sealing rings are arranged on the output shaft.

68. (Previously Presented) The compact drive according to claim 51, wherein the housing includes housing parts and housing covers.

69. (Previously Presented) The compact drive according to claim 51, wherein the housing includes one of (a) one and (b) two central housing parts and one housing cover.

70. (Previously Presented) The compact drive according to claim 51, wherein the housing does not have any cooling fins or cooling fingers.

71. (Previously Presented) The compact drive according to claim 51, wherein at least one of (a) a housing cover is connected to an electronic circuit and (b) an electronic circuit is integrated in the housing cover.

72. (Previously Presented) The compact drive according to claim 71, wherein the housing cover, including the electronic circuit, is electrically connected to a further electronic circuit by an electric plug-and-socket connector.

73. (Previously Presented) The compact drive according to claim 71, wherein the housing cover, including the electronic circuit, is electrically connected to a further electronic circuit by an electric plug-and-socket connector adapted for quickly and easily replacing the housing cover in the event of maintenance work or repairs.

74. (Previously Presented) The compact drive according to claim 51, wherein a housing cover for an electronic circuit is detachably connectible to a central housing part, a heat barrier being provided in the connection.

75. (Previously Presented) The compact drive according to claim 74, wherein the heat barrier is arranged as one of (a) a seal and (b) a plastic housing part.

76. (Previously Presented) The compact drive according to claim 51, wherein a housing cover for an electronic circuit is oriented so that a normal direction is perpendicular to the output shaft.

77. (Previously Presented) The compact drive according to claim 51, further comprising electrical connection terminals for load leads arranged on a housing part of the compact drive.

78. (Previously Presented) The compact drive according to claim 51, further comprising at least one electronic circuit for one of (a) modulating and (b) demodulating information upon load leads.

79. (Previously Presented) The compact drive according to claim 51, further comprising at least one electronic circuit for one of (a) modulating and (b) demodulating information upon load leads in accordance with one of (a) a Powerline and (b) an FSK method.

80. (Previously Presented) The compact drive according to claim 51, wherein a gear stage furthest to an output side is arranged as a right-angle gear stage.

81. (Previously Presented) The compact drive according to claim 51, wherein a gear stage furthest to an output side includes one of (a) a worm-gear stage (b) a bevel-gear stage and (c) spiroid-gear stage.

82. (Previously Presented) The compact drive according to claim 51, wherein the brake is arranged as an energy-storage mechanism.

83. (Previously Presented) The compact drive according to claim 51, wherein the brake includes one of (a) a flywheel and (b) a rotating mass.

84. (Previously Presented) The compact drive according to claim 51, further comprising at least one sensor connected to an electronic circuit, in response to mounting of a housing cover, the at least one sensor positionable such that values of physical variables of a motor region are determinable.

85. (Previously Presented) The compact drive according to claim 84, wherein the physical variables include at least one of (a) temperature, (b) angular speed of a rotor and (c) angle of the rotor.

86. (Previously Presented) The compact drive according to claim 51, wherein an electronic circuit is arranged to at least one of (a) monitor, (b) control and (c) regulate a temperature of a central housing part.

87. (Previously Presented) The compact drive according to claim 51, wherein a braking resistor and lubricant are connected to allow effective heat conduction, so

that the lubricant is at least one of (a) heatable and (b) warmable by the braking resistor.

88. (Previously Presented) The compact drive according to claim 87, wherein a heat-transfer resistance from the braking resistor to the lubricant is less than a heat-transfer resistance the braking resistor to the environment.

89. (Previously Presented) The compact drive according to claim 88, wherein the lubricant includes a gear lubricant agitated during operation.

90. (Previously Presented) The compact drive according to claim 87, a heat-transfer resistance from a stator winding to the lubricant is less than a heat-transfer resistance from the stator winding to the environment.

91. (Previously Presented) The compact drive according to claim 90, wherein the lubricant includes a gear lubricant agitated during operation.

92. (Previously Presented) The compact drive according to claim 87, wherein the braking resistor is arranged in at least one of (a) a recess, (b) a depression and (c) a pocket of a central housing part.

93. (Previously Presented) The compact drive according to claim 87, wherein the braking resistor extends into a gear region such that a housing pocket is arranged closer to an input side than to an output side.

94. (Previously Presented) The compact drive according to claim 51, wherein at least one of (a) an electronic circuit includes an electronic label and (b) the electronic circuit is connected to one of (a) a bus and (b) a field bus.

95. (Previously Presented) The compact drive according to claim 51, wherein a core assembly of a stator of the motor, including stator windings, is supported in a central housing part.

96. (Previously Presented) The compact drive according to claim 51, wherein a core assembly of a stator of the motor, including stator windings, is detachably connected in a central housing part.

97. (Previously Presented) The compact drive according to claim 51, wherein a core assembly of a stator of at least one of (a) an angular-position sensor and (b) an angular-speed sensor is detachably connected in a central housing part.

98. (Previously Presented) The compact drive according to claim 51, wherein a core assembly includes teeth one of (a) onto which stator windings are slid and (b) around which the stator windings are wound.

99. (Currently Amended) An axially offset, right-angle gear stage for a compact drive, comprising:

a central housing part, each drive component surrounded by the central housing part and at least one housing cover of a respective drive component to form a specific housing;

wherein the gear stage is arranged as a spiroid gear stage;

wherein the spiroid gear stage includes a wheel and a pinion engaging with the wheel, the wheel including gear teeth on a front side, and the pinion having a cylindrical contour at an outer periphery.

Claims 100 to 101. (Canceled).

102. (Currently Amended) The gear stage according to claim 99, wherein ~~the gear stage is arranged as a spiroid gear stage in which a pinion axis~~ an axis of the pinion does not intersect ~~a wheel axis~~ an axis of the wheel and is oriented perpendicularly to it, an axial offset less than a pitch-circle radius of ~~the~~ gear teeth of the wheel.

Claims 103 to 105. (Canceled).